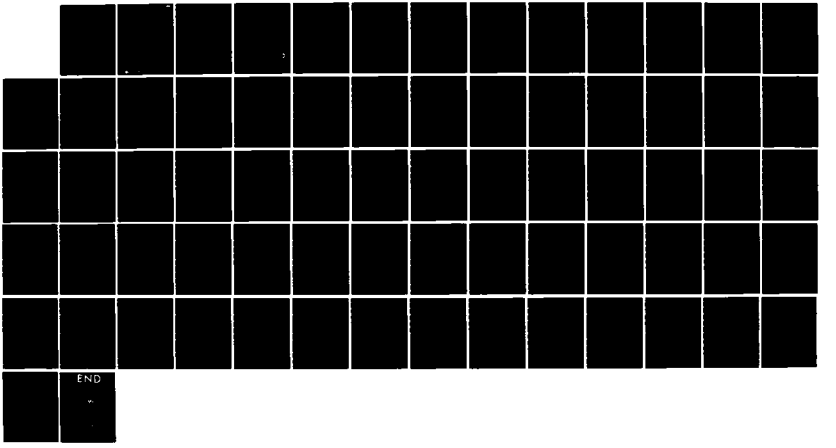
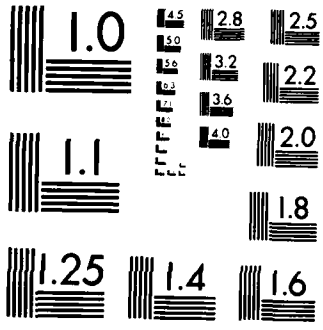
AD-A154 585 CHANGING RACE RELATIONS IN ORGANIZATIONS: A COMPARISON OF THEORIES(U) YALE UNIV NEW HAVEN CT SCHOOL OF ORGANIZATION AND MANAGEMENT C P ALDERFER MAR 85 1/1

UNCLASSIFIED SOM-WP-66 ONR-TR-4 F/G 5/11 NL





# Working Paper Series A

Organizational Behavior

Changing Race Relations in Organizations:
A Comparison of Theories

Clayton P. Alderfer

Working Paper #66

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

| REPORT DOCUMENTATION PAGE | | READ INSTRUCTIONS BEFORE COMPLETING FORM |
|---|---|---|
| 1. REPORT NUMBER<br>TR ONR-4 | 2. GOVT ACCESSION NO. | 3. RECIPIENT'S CATALOG NUMBER |
| 4. TITLE (and Subtitle)<br>CHANGING RACE RELATIONS IN ORGANIZATIONS: A COMPARISON OF THEORIES | | 5. TYPE OF REPORT & PERIOD COVERED<br>Interim<br>6. PERFORMING ORG. REPORT NUMBER<br>SOM WP 66 |
| 7. AUTHOR(s)<br>Clayton P. Alderfer | | 8. CONTRACT OR GRANT NUMBER(s)<br>N00014-82-K-0715 |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS<br>Yale School of Organization and Management<br>Box 1A<br>New Haven, CT 06520 | | 10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS<br>NR 170-943 |
| 11. CONTROLLING OFFICE NAME AND ADDRESS<br>Organizational Effectiveness Research Programs<br>Office of Naval Research, Arlington, VA 22217<br>Code 4420E | | 12. REPORT DATE<br>March 1985<br>13. NUMBER OF PAGES<br>48 |
| 14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office) | | 15. SECURITY CLASS. (of this report)<br>Unclassified<br>15a. DECLASSIFICATION/ DOWNGRADING SCHEDULE |
| 16. DISTRIBUTION STATEMENT (of this Report)<br>Approved for public release; distribution unlimited | | |
| 17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) | | |
| 18. SUPPLEMENTARY NOTES | | |
| 19. KEY WORDS (Continue on reverse side if necessary and identify by block number)<br>race relations, contact hypothesis, intergroup theory, racism, changing organizations, individual and group levels of analysis | | |
| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number)<br>This report reviews the major social psychological paradigm for changing race relations, identifies questions about unexamined assumptions in the framework, presents a revised formulation of the paradigm, states a series of metatheoretical concepts for assessing social theories, and presents an alternative intergroup theory for understanding and changing race relations in organizations. | | |

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

S/N 0102-LF-014-6601

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

*Working Paper Series A*

**Organizational Behavior**

# Changing Race Relations in Organizations: A Comparison of Theories

Clayton P. Alderfer

Working Paper #66

# Changing Race Relations in Organizations: A Comparison of Theories*

by

Clayton P. Alderfer



* I wish to thank Charleen Alderfer, Robert Tucker, and Leota Tucker for all of our work together and Jack Gillette, Ed Mayhew and David Thomas for their careful reading of an earlier version of this manuscript.

working independently, conflictually, and cooperatively with white social science (Ladner, 1970; Boykin, Anderson, and Yates, 1979; Jones, 1979; Tucker, 1984).

In 1953, a group of social scientists who were specialists in race relations submitted a brief to the United States Supreme Court in order to influence the now historic Brown versus Board of Education decision. That document summarized social science knowledge about the "separate but equal" legal doctrine of racial segregation in public schools. As is well-known, the court decided in favor of the plaintiff, and a new era in race relations in the United States was begun. The three authors of the 1953 brief -- Stuart Cook, Kenneth Clark, and Isidor Chein -- constituted a mixed racial team. Their views on improving race relations reflected broadly shared beliefs among social scientists of that era and have remained something of a paradigm for American social psychology to this day (Amir, 1969; Cook, 1979, 1984; Gerard, 1983).

The name given to the basic paradigm is the contact hypothesis (Amir, 1979; Cook 1984). Research pertaining to the hypothesis has occurred in field and laboratory settings, where the degree of reasonable causal inference varies from study to study. Based in part on the fact that the hypothesis remains crucial after more than thirty years of empirical investigation and theorizing, one must conclude that social scientists continue to have confidence in its soundness. Major alternative formulations, to this writer's knowledge, have not been proposed.

Although the exact details of how the contact hypothesis is stated vary somewhat, Cook (1984, p. 156) provides five conditions that predict favorable attitude change.

"We all suffer, black and white, from the history of our country. No way around it. The sooner we realize that and deal upfront with it, the better we will all be."

John Thompson (1984, p. 69)

"The ... club became an institution, a creative response to the segregation whites imposed. If segregation has become less stark and pervasive, its relaxation has not removed the need for the ... club. The members share a common history and style; they preserve an angle of vision, memories, a heritage... They're the drum. Just like the drum in the jungle. They know the truth and they tell it."

John Wideman (1984, p. 59)

## Introduction

Suppose we, black and white, decided to deal upfront with race relations in large predominantly white organizations, what could we do? What difference, if any, might it make? Could several angles of vision, black and white, be preserved and respected? Could more than a single drum play? Independently? In discord? In harmony?

These are not new questions. White social science has been concerned about race relations in the United States for more than fifty years, and recently the results of that work have again come into question (Gerard, 1983; Cook, 1984). Now there is also an established black social science

(1) Cross racial contact should be between black and white people of equal status.

(2) Blacks should behave in a manner that disconfirms white stereotypes of black people.

(3) The relationship between blacks and whites should be structured to promote cooperation rather than competition.

(4) Contact between blacks and whites should provide opportunities for greater intimacy so whites will have a clear opportunity to experience blacks as unique individuals.

(5) Social norms favoring equalitarian race relations should be established and supported.

Cook (1979) recognizes that these conditions have not been satisfied in many situations of school desegregation. Weigel, Wiser and Cook (1975) described the role of social scientists in the process of desegregation as reactive rather than innovative: "Their role has been to evaluate the outcome of desegregation experiences as they have occurred. They have not, by contrast, proposed and studied alternative methods by which school desegregation might be carried out." (Weigel, Wiser, and Cook, 1975). Clark (1979) has been even more direct and explicit in his criticism of the roles played by social scientists in desegregation research. He writes, "Why did social scientists in the 1960's and 1970's misdirect their efforts and devote countless hours to an unrewarding study of the confusing outcomes of desegregation carried out under conditions <u>already known to minimize its</u> effectiveness?... At best their writings reflect their identification with the pervasive racism of the society within which they were socialized and with which they are now identified." (Clark, 1979, pp. 479-81, emphasis his).

Desegregating schools is changing organizations, because schools, after all, are organizations. Desegregation has also been attempted in military and in business organizations (Landis, Hope, and Day, 1984; Nordlie, 1979; Alderfer, Alderfer, Tucker and Tucker, 1980; Davis and Watson, 1982). However, the contact hypothesis includes no explicit concepts from group and organization theory. The propositions stated above apply as readily -- probably more readily -- to one-on-one contact between individuals as they do to larger social units. Moreover, there is widespread understanding among social scientists of varying disciplines and political persuasions that "social context" makes a crucial difference in determining whether the conditions favoring cooperative race relations can be achieved (Cook, 1983; Gerard, 1984; Hochschild, 1984). For individuals in schools, business, and the military, the social context is organizational. The contact hypothesis is limited because it does not include concepts for understanding and changing groups and organizations.

## Questions About the Basic Paradigm

As it stands, the contact hypothesis excludes: (1) reference to the race or racial commitments of investigators, and (2) conscious attention to the nature of complex organizations. In light of the mixed results from efforts to change race relations in organizations, questions naturally arise about how the hypothesis might be modified. We next examine each element of the basic paradigm including racial and organizational perspectives.

(1) Cross racial contact occurs between black and white people of equal status. Life in organizations is marked by human interactions among

people who do not have equal status. An essential condition for organizations to exist is hierarchy of authority (Argyris, 1957). In the United States, hierarchy of authority in organizations is correlated with identity group membership (Alderfer, 1977). Blacks generally occupy lower ranking positions than whites in the military, schools, and business (Nordlie, 1979; Cohen, 1980; Davis and Watson, 1982). Thus, even though a work group or a classroom might be designed so that equal status between blacks and whites is approximated, the larger social system is unlikely to reflect similar conditions. How likely is it that blacks and whites remain unaware of discrepancies between their smaller units -- even if they approximate equal status -- and the larger social system, which is virtually guaranteed not to consist of equal status between blacks and whites? In addition, there is also the interdependency and interaction between smaller units and the overlapping social systems in which they are embedded (Cohen, 1980; Alderfer and Smith, 1982). An open systems perspective argues that subsystems, and conversely (though less powerfully) suprasystems may be influenced by subsystems (Miller, 1978; Katz and Kahn, 1966).

Therefore, the equal status postulate must be complemented by additional analyses that pertain to the effects of groups, organizations, and the larger society on relations among individuals; that deal with inequality among these larger units and the mutual influence between larger and smaller units; and that recognize that life in organizations is rarely constant but most likely the results of dynamic processes that operate simultaneously at several levels of social grouping.

(2) Blacks disconfirm white stereotypes. This postulate probably carries many more implicit messages than the simple truth it states. To

be sure, desegregation and improved race relations are less likely to work if black-white contact simply reaffirms already existing white beliefs that blacks do not deserve equal status treatment. For the most part, whites are the dominant group, and if they do not alter their unfavorable stereotypes of blacks, they have less reason to change. White stereotypes have long served as rationalizations for white dominance.

In describing his experimental strategy for research on the basic paradigm, Cook (1984, p. 156) has written, "Contact with stereotype-disconfirming blacks was insured through the experimenter's selection of black confederates of educational background equivalent to that of the research subjects." This statement gives equivalent educational background as the means to "insure[d]" that white stereotypes were disconfirmed." But the subtleties of interacial contact suggest that the process is more complex than matching educational background. In modern organizations blacks often have to have more education than whites just to get "equal" treatment. To a person familiar with race relations at group, organization, and cultural levels, the fact that Cook's experiment employed white female subjects from colleges in Nashville, Tennessee is also relevant. Cook's experiment did not study "just people" but a particular gender in a specific region of the country, where both gender and region are relevant to the social context of race relations (Davis and Watson, 1982). Although Cook reported the gender and location of his respondents, he did not discuss why he chose this particular setting or what implications it might have for understanding his results.

Another feature of this postulate is the notion that blacks should or can disconfirm white stereotypes. The subtle normative message is that

whites will change if blacks do not confirm their worst fears about cross racial contact. Is that an accurate view of white behavior? Is it the job of blacks to change whites? Or is it the task of whites to change themselves?

(3) The black-white relationship promotes cooperation, not competition. In organizations the effects of hierarchy induce competition. Individuals and groups compete to receive their shares of scarce resources distributed by those in higher ranking positions. Individuals compete with one another to move upward in the hierarchy. A special feature is added to race free competitive dynamics when one recognizes that in most organizations in the United States, whites predominantly hold the higher level positions.

In schools there are questions of grades, class rank, and mobility to subsequent educational opportunity. Important experimental innovations in schools have demonstrated the benefits of cooperative tasks that balance the status of the students who work together (Aronson, 1978; Cohen, 1984). Interventions of this kind, however, still occur within an organizational context that is competitive. Class ranking systems produce a unitary dimension of assessment. Institutions admitting new members frequently accept and place them based on their place in the competition for grades and class rank. Few would argue that students remain unaware of the competitive elements in their environment. In military and business organizations, there is normally a great deal of attention devoted to promotions. Researchers generally recognize that mobility decisions are highly subjective and thus subject to the full-play of evaluator's biases -- whether the people operate as individuals or in personnel committees (Davis and Watson, 1982; Alderfer, Alderfer, Tucker and Tucker, 1980).

The relative position of blacks and whites in structuring and assessing competition in organizations affects how the competitors act and how they understand their experience (Cohen, 1980; Davis and Watson, 1982). When mainly whites make the rules and determine the winners and losers, blacks and whites inevitably experience the situation differently. If whites remain unaware of these effects, they are likely to misperceive whether cooperative interventions produce the intended effects.

(4) Provide opportunities for whites to experience blacks as unique individuals through relatively intimate discussions. The objective of this condition is for whites to overcome their tendency to perceive all blacks as indistinguishable. This proposition is similar to the idea that whites should receive information that disconfirms a major stereotype that "all blacks are alike." Whites who learn to know blacks as individuals form concepts that differentiate among members of the black group.

However, there are also latent problems with an orientation that completely "individualizes" blacks. In a setting that is predominantly white and that does not have norms recognizing group differences, pressures to treat everyone as an individual may readily convert to norms that deny racial differences. The effect on blacks in such a setting is pressure to act as they were people with dark skins. Paradoxically, a norm whose expressed purpose was to support the uniqueness of individual people, taken to the extreme, has the effect of suppressing that very condition. Black people who are expected to act as if they were no different than whites in order to survive and succeed in an organization are hardly being treated as unique individuals. Black people who are respected for both their group and individual identities are more fully individualized

received careful attention and analysis, and Comer (1980, pp. 71, 242) made his notion of authority and organization clear.

> The principal should be the leader of the representative governance group. A task-oriented, problem-solving, facilitating style is more effective than an autocratic, authoritarian one. ... the principal cannot abandon his or her responsibility as leader... the governance and management mechanism is the pivotal element [his emphasis]... It provided a [ ] way for everyone to be informed... [it] established priorities... [it] acted to resolve... real or potential conflict before disappointment or a sense of being cheated or abused led to serious intergroup and interpersonal difficulties... [It] gave a sense of coherence and direction to program staff.

The governance group included representation from teachers, parents, administrators, and consulting staff. It thus provided a mechanism by which all relevant groups could speak and be heard in an influential manner. The governance system, however, carried the most important stipulation, "that no person or group can be allowed to paralyze the person responsible for making the final decision [emphasis his] (Comer, 1980, p. 69).

External relations for the project also received careful attention. Comer (1980) recognized the perceived status differences between university and school positions, reported his own and others feelings, consciously gave up the right to write about the project until real achievement had been demonstrated, and acted to keep premature public attention from heightening feelings of rivalry between school people, "who do the work," and university people, "who get the credit." Key members of the school system received courtesy appoinments at the Yale Child Study Center. Throughout one observes a most sophisticated, though for the most part tacit, theory of authority, group relations, and organizational dynamics. After an eleven year period, there were marked gains in the standardized reading and mathematics test scores of children in the experimental schools.

> ceas like "cooperation" and "multicultural education" are not helping educational researchers face squarely what must be understood if we are to progress... (Cohen, 1980, p. 251-252).

The contrast in frames of reference and theoretical positions of these two quotations is notable. In the first, we see an easy and natural transfer of learning from the laboratory to the classroom -- perhaps aided by the notion that classroom teachers have comparable degrees of control over their settings as experimenters do over theirs. Aronson and Osterow (1981) provide other good examples of this transfer process. In the second, we see the picture that emerges when one observes receptively how variables outside the control of an experimenter in a laboratory or a teacher in a classroom effect what happens inside those two systems.

An important study contrasting markedly with the research so far described is a long term intervention program in New Haven, Connecticut Public Schools with the collaboration of the Yale Child Study Center (Comer, 1980). In terms of explicit objectives, this was not a program to desegregate schools or to improve race relations. The major stated goal was to improve the climate of relationships among all people involved in the schools (children, teachers, parents, administrators, consultants) and to facilitate significant academic and social growth of students in two inner city schools. In actual practice, however, the project included many dimensions of race relations. The study described the racial history of the city, the racial composition and racial attitudes of school staff, and the racial dynamics of the school community as they affected the project.

Covering a eleven year period, reporting both turmoil and success, and providing vivid descriptions of crucial events, the investigation exemplifies clinical research. The behavior of specific individuals and groups

Beyond the events in the laboratory study, there is also the question of how the research results are transferred to on-going organization settings. In recent years, there have been a number of successful interventions designed to produce cooperation in the classroom between black and white children (Aronson, 1978; Cook, 1984; Johnson, Johnson, and Maruyama, 1984). Researchers in this tradition take the classroom as their unit, implement cooperative teaching techniques, and often find favorable outcomes. At the same time there are also studies that raise serious questions about how possible it is to consider the classroom in isolation from the social system in which it is embedded and how well social scientists understand the conditions that are necessary to achieve effective cross-racial cooperation. These two perspectives and the conclusions that are drawn from them may be illustrated by quotations from Johnson, Johnson, and Maruyama (1984) who represent laboratory research on cooperation and Cohen (1980) who works in the field with on-going organizations.

> A cooperative, compared with competitive or individualistic, learning situation promotes greater cross-ethnic and cross-handicap interpersonal attraction... Social psychology has often been criticized for generating extensive but trivial knowledge... As can be seen from this chapter, one of the areas of inquiry within social psychology least deserving of this criticism is the study of cooperative, competitive, and individualistic situations. For not only have theory development, the validation of theory, ... been addressed but the specific bridges to practice have also been built (Johnson, Johnson, and Maruyama, 1984, p. 202).

> In a deep, intellectual sense, social scientists do not know what they are talking about when they speak of the desegregation situation... The more I have studied the desegregation situation, the more I have come to understand that what happens to children inside a particular desegregated school is a product of changing sociohistorical forces..., of status and power relations of minority to majority in the society and community, as well as a product of social and structural forces within the school... Relatively simple pana-

chief topic for study. Social psychologists conduct laboratory experiments because they believe the method can isolate the phenomena under study from extraneous sources variation outside the experimenter's control. If that sort of control can be achieved, then proper experimental procedures -- including randomly assigning subjects to treatments and independently observing each person's data -- permit drawing causal inferences about the relationship of independent and dependent variables. A crucial question is whether the sort of isolation of conditions envisioned by the idealized experimental design can be achieved in actual practice. Viewed as a problem in organization theory, the desirable laboratory organization should be a closed system except for those variables either directly manipulated by the investigator for experimental purposes or indirectly left to vary in a purely random fashion. Research results on experimenter-subject relations can be fit into this paradigm because they occur inside the laboratory under the control of investigators (Carlsmith, Ellsworth, and Aronson, 1976). In actual practice, many questions have been raised about whether the ideal conditions of experimental control can be meaningfully and realistically achieved in the laboratory (Wuebben, 1974; Carlsmith, Ellsworth, and Aronson, 1976; Alderfer, 1985).

Research topics vary in the degree to which lack of adequate control of the laboratory is likely to affect the interpretations of findings. Race relations in the United States is an area of investigation that would be most difficult to isolate within a laboratory setting. As noted above, even though Cook (1984) established a laboratory organization in which blacks and whites were of approximately equal status, neither the organization structure of the study itself nor of the wider institution in which the study was set had a black-white power balance.

not only examining individuals in relation to groups but also groups in relation to other groups and to the larger system in which they are embedded. From this broader perspective, scholars whose personal values include high respect for the individual can see more readily that favorable as well as unfavorable consequences for individuals follow from the condition of their groups in relation to other groups. Concepts that always place individuals in conflict with group define the special rather than the general case (Alderfer, Tucker, Morgan, and Drasgow, 1982).

(3) View the laboratory as an organization and the organization as a laboratory. Much of the social research on race relations has been influenced by the methological paradigm of laboratory social psychology. In some instances this means that studies testing key propositions have been conducted in the laboratory. Cook (1984), for example, created a work organization in the laboratory to test the contact hypothesis. In other cases researchers work in the field but do so from an orientation that is guided by the values of laboratory work. Gerard and Miller (1975) brought their preferences for the laboratory organization to the problems of desegregating the Riverside, California schools. The first situation creates an organization in order to have a laboratory. The second attempts to treat an on-going organization as if it were a laboratory. Both approaches are importantly influenced by the explicit or implicit understanding of organizations that is held by the principle investigator.

For more than twenty years, attention has been devoted to the social psychology of the laboratory experiment (Orne, 1962; Reicken, 1962; Rosenthal, 1966). This work has been primarily interpersonal in focus with the relationship between the experimenter and the subject as the

integrity of a group is maintained as its individual members become integral members of the larger society. This situation clearly does not pit individual against group but instead recognizes both units and their relationship to the larger social system.

Commenting on Berry's (1984) analysis in relations to their own, Brewer and Miller (1984, p. 289) write:

> Category identity may remain a feature of individuals that enter into -- but does not solely determine -- the formation of impressions, interpersonal evaluations, and interaction decisions. In our view, then personalization is compatible with -- indeed, probably essential to -- the integration model of intergroup relations as described by Berry.

But the term "personalization" is an individually based concept. It's explicit purpose is to de-emphasize group level responses. Of their three terms, differentiation, which respects both individual and group boundaries, seems more compatible with integration. Personalization -- the authors' comments notwithstanding -- seems more similar to assimilation than to integration. The basic problem seems to be that Brewer and Miller (1984) do not consider the larger social context when they form their concepts, and as a result their <u>theory</u> is biased against group level reasoning even though their personal values espouse respect for group cultures.

I believe that terms referring to individuals and groups should be conceptually independent. This orientation allows investigators to examine individual effects, group effects, and the interaction between individual and group effects. The alternative <u>apriori</u> defines one concept in terms of the other and thereby forces one variable to be in opposition to the other. To take group level considerations on their own terms requires

are group members who are undifferentiated and interchangeable with one another. Differentiation refers to the capacity to distinguish among different members who belong to in-groups and out-groups and to recognize subgroups within in-groups and out-groups. Personalization further de-emphasizes group identification -- i.e., category based contact -- and encourages people to deal with each other in terms that are more individually relevant. In comparison to Triandis (1983), Brewer and Miller (1984) give more conceptual space to the possibility of individual and group effects operating simultaneously and independently rather than in opposition. Their concept of differentiation carries this flavor most fully. However, two out of three of their concepts -- category based interaction and personalization -- clearly carry the idea of individual versus group identification.

Berry (1984) examines the kinds of relations that may occur among cultural groups and the larger society in which they are embedded. Two questions are of chief concern: (1) whether a given group culture is to be respected and retained; (2) what the quality of relationship between any group and the larger system in which it is embedded is to be. Posing the questions in this manner raises the focus of attention to group level concerns in a manner that accepts both individuals and groups as viable units with their own rights. Interdependence between group and individual concerns is recognized, yet the opposition of individuals versus groups is viewed as only one of several possible answers to the key questions. Berry (1984) and others use the term assimilation to describe the condition in which individuals give up their group identities in order to move into the larger society; this is a condition of individuals versus group identification. The term integration refers to the situation where the cultural

(2) Both individual and group level concepts are necessary to explain racial dynamics. The theoretical question is how to reason about individual and collective properties when the subject is race. Among social scientists, there are a variety of solutions. Each intermingles the social position of the investigator, the value questions that arise from individual versus collective tensions, and the answer to the conceptual problem.

Triandis (1983), for example, proposes the distinction between allocentric versus [emphasis mine] idiocentric social behavior. He analyzes the relationship between Hispanics and Mainstream. According to his view, allocentric, the more collective term, is used to characterize individuals whose behavior is strongly influenced by how it will affect others. In contrast, idiocentric is the term for individuals who give more weight to how their behavior will affect themselves rather than others. Triandis (1983) refers to an allocentric-idiocentric "axis" indicating that these tendencies stand in opposition to each other on a single dimension. Therefore, movement in a more collective direction necessarily is away from a more individual direction, and vice versa. From this conceptual orientation, it is not surprising that he suggests problems between Hispanics and large bureaucracies should be solved by training Hispanics to become comfortable in individualistic settings (Triandis, 1984). The idea of changing the social systems is a collective solution and threatens his individualistic values.

Brewer and Miller (1984) distinguish among category-based, differentiation, and personalization of in-group and out-group members. Category based interaction means that individuals respond to each other as if they

and respondent is action favoring equalitarian norms. In the research organization at the level of interviewer, blacks and whites will have similar status. But this method may also require changing the organization. Gerard and Miller (1975, p. 64) write, "Attempts to hire Blacks and Mexican-Americans were thwarted by university rules that required a certain minimum educational background for workers doing such testing." Gerard and Miller legitimately could have gotten Blacks and Mexican-Americans to be testers if they had changed the university rules or developed their research organization to find people with the sort of qualifications that were required. Either response would have been organizational change. Some phenomena in organizations simply may not be available for study without changing the condition of the system (Alderfer and Brown, 1974, pp. 212 ff.)

*The concept of racism calls attention* to the collective and often unconscious forces in a society and its institutions that maintain the dominance of one racial group at the expense of another (Jones, 1972; Alderfer, 1982). Without conscious attention to the likely consequences of racism whenever racial issues are at stake, any organization -- including a research organization -- is likely to show the very same effects. For this reason, we believe that it is essential for researchers who work on the subject of race to address explicitly their own stand on the subject of racism. Doing so does not guarantee that the research process will escape racist practices. But doing so does break the pattern of denial that maintains racism. Unless investigators acknowledge their own races, describe their race relations, and address the subject of racism, they miss important aspects of the racial dynamics they seek to understand and will maintain the structure of racism they seek to change.

report that blacks show more distrust of whites when interviewed by blacks than by whites. Even though the published results speak clearly about the probable bias introduced by having exclusively white investigators study race, white research directors proceed to employ predominantly white research teams, nevertheless (Gerard and Miller, 1975). One rationale for working in this manner was described by Gerard and Miller (1975, p. 65) as follows:

> The tester's bias effects thus remain an alternative explanation for ethnic group differences on many of our measures. However, the experience of the minority child in the interview situation was not unlike the situation he constantly had to face in the "real world." American culture is dominantly white and middle class. In particular, most teachers and school officials are white. In this sense, the interview situation did not constitute a serious threat to validity.

These white investigators are saying that their concept of validity for race relations research is based on the status quo of contemporary American society. But it is <u>that</u> society with its norms about the "proper" relationships between blacks and whites that had established and maintained the inequities characteristic of American race relations. The argument made by Gerard and Miller (1975, p. 65) is subtlely connected to an important question between research and change. Research directors may decide that black interviewers should interview blacks and white interviewers should interview whites because this method will result in more honest responses from both racial groups. Research managers may also decide that white interviewers should interview both blacks and whites, because whites tend to hold most positions of authority over blacks in our society. Which is the more valid procedure? Both are likely to produce repeatable -- though different -- results. Matching the race of interviewer

> racial problems are ignored. Deep-seated ones are often treated as if they don't really exist... Blacks are often oppressed by this silence on race. Their careers and morale are affected by this thing they cannot mention.

Within social science there is not quite the deafening silence on race that Davis and Watson identify in business corporations. But the difference is not dramatic either. Black social scientists increasingly are willing to discuss how race affects their experience and their work (Ladner, 1970; Jones, 1979; Boykin, Anderson, and Yates, 1979; Tucker, 1984). Among white social scientists, however, the readiness to acknowledge that one's whiteness affects one's research is far less frequent (Merton, 1972; Sarason, 1981; Alderfer, 1982). For whites there is membership in the "rational-objective" northern European tradition, which teaches people that they can remove themselves from the field they study (Tucket, 1984). The part played by race in that scientific ideology is largely overlooked in the education provided by most doctoral programs (Jones, 1979; Sarason, 1981).

If most white social scientists do not think of themselves as white when they do research, it is hardly surprising that they rarely report their race, discuss the effects of the racial composition of their research team, describe the race relations among team members, or notice the effect of their race on those who are a part of the research.

When scientific objectivity functions as an ideology, it tells social researchers that they can overlook their own race in the conduct of research. Nevertheless, empirical data indicate that the race of interviewers plays an important part in determining the information available about racial dynamics (Hyman et al, 1954). Schuman and Hatchett (1974), for example,

| Old Version | New Version |
|---|---|
| 4. Contact between blacks and whites should provide opportunities for greater intimacy so whites will have a clear opportunity to experience blacks as unique individuals. | 4. Contact between blacks and whites should provide opportunities for greater intimacy so blacks and whites will have opportunities to experience each other as unique individuals. |
| 5. Social norms favoring equalitarian race relations should be established and supported. | 5. Social norms inhibiting equalitarian race relations should be examined and eliminated whenever possible, and social norms favoring equalitarian race relations should be established and supported. |

The revised version of the contact hypothesis keeps the basic formulation intact. It does not add new concepts. It simply restates the original propositions so they are more responsive to the questions raised about the original version.

## Metatheoretical Issues on Changing Race Relations in Organizations

It turns out, however, that conceptual concerns were shaping the critique and the revision. Generally a paradigm is not replaced just because it has flaws. Change in theories came about when problems with the old system are recognized and when new formulations become available (Kuhn, 1962). I turn next to a number of propositions about forming theories and, after that, to the statement of an alternative theory of changing race relations in organizations.

(1) Race, race relations, and racism among social scientists shapes their research and intervention. In their book on Black Life in Corporate America, Davis and Watson (1982, pp. 2-3) wrote:

> All along we were concerned that within corporations there was not a great deal of talk about race. It is mentioned only when it becomes obvious that a racial problem must be dealt with. Subtle

by a peer of the subject (the white confederate). Each of these conditions is created inside the experiment and states by symbol and action that racial equality is the dominant norm. Outside the experiment, however, white dominance remains. Cook, a white man, is the single principle investigator; black and white experimenters and confederates report to him.

Because our society as a whole does not behave according to norms of racial equality, inevitable limits on the extent to which investigators can provide an unconflicted message about norms of racial equality to research participants will arise. The contact hypothesis does not acknowledge that norms may differ between different levels of social grouping. It cannot provide for cross level analysis because it does recognize varying orders of human entities.

Raising questions about the contact hypothesis does not imply that it should be abandoned. Revision is possible. The formulation can change in order to become more responsive to organizational dynamics and to the racial commitments of investigators. Below I state a new version of each element and place it next to the comparable original statement.

| Old Version | New Version |
|---|---|
| 1. Cross racial contact should be between black and white people of equal status. | 1. Cross racial contact should set in motion processes between black and white people that bring about more equal status. |
| 2. Blacks should behave in a manner that disconfirms white stereotypes of black people. | 2. Whites should examine the forces in themselves and in the larger social systems that promote stereotypes of black people. |
| 3. The relationship between blacks and whites should be structured to promote cooperation rather than competition. | 3. Recognizing the inevitable competition characteristic of hierarchical organizations, managers and consultants should adjust structures to promote cooperation rather than competition whenever possible. |

than those who are treated as if all blacks are alike or as if blacks are no different than whites.

This postulate also carries the implicit feature that it is special job of blacks to disclose their uniqueness to whites. As a result of the power imbalance, no norm of reciprocity is stated. The result could imply that whites do not need to describe their uniqueness to blacks. Perhaps there is an unexamined assumption that all whites are unique individuals without a group identity. In the context of race relations, this is a highly questionable assumption (Alderfer, 1982; Alderfer, Tucker, Morgan and Drasgow, 1983).

(5) Establish and support norms of equality in race relations. This postulate has much in common with the rule of equal status contact, but there is an important difference. In the first condition, the notion is that contact occurs between individuals of roughly comparable status, independent of race relations: Thus, an "A" student who is black meets with an "A" student who is white; a corporal who is black meets with a corporal who is white; etc. The present statement refers to the status of the races as groups rather than to the status of individuals who hold roles that are conceptually (though rarely behaviorally) separable from race. Thus, the postulate means equality among racial groups.

In practice the extent to which this condition can be satisfied depends on organizational context. Cook (1984, p. 156) notes in his experiment, "Social norms favoring equalitarian interracial relations and race equity were introduced, on part by the use of racially integrated supervisory staff, in part by the actions of the work supervisor, and in part through the support of desegregation by a white confederate." Cook's method includes social structure, behavior by the supervisor, and behavior

Investigators, regardless of whether they are in the laboratory or in the field, inevitably take a stand about the organizational dynamics of the setting in which they work. They may be more or less conscious of their own organization theory. They may vary in how active they become in attempting to shape the organizational conditions of their study. Social research systems, like any other human organization, have an internal structure designed to achieve objectives and a series of relationships required to maintain connections with external environments.

(4) Knowledge availabe through clinical research is qualitatively different from knowledge produced through basic-research-followed-by-development. Whenever a research topic evolves from what is understood to be a social problem, questions arise about how theory, research methods, and results relate to the disturbing condition. Clinical research keeps a relatively close relationship between investigators and people who have the problem (Erickson, 1964; Berg, 1980; Alderfer, 1983). Basic-research-followed-by-development maintains a more distant relationship between the people who generate knowledge and those who work directly on the problem (Gerard, 1983; Cook, 1984).

Both medicine and social science show variations of the two models. Clinical research in medicine, for example, occurs when physicians develop new surgical procedures and treat patients according to the new methods. In the processes of treatment and research, the investigators have direct contact with the people they serve. They experience directly the vicissitudes of the treatment process, and they directly observe the anticipated and unanticipated consequences of their actions. Similar patterns may be observed for clinical research on psychotherapy. Psychotherapists working from a strong theory encounter treatment consequences that raise questions

about the theory. They adjust their treatment methods, observe the effects, and propose revisions in the theory (Searles, 1955; Kohut, 1977). Basic-research-followed-by-development in medicine occurs, for instance, when medical scientists examine and test a new drug in the laboratory with animals, but never themselves prescribe the medicine to patients. The R&D orientation maintains a sharper role differentiation between scientist and practitioner than the clinical approach does. Basic-research-followed-by-development in psychology happens when investigators establish basic principles about emotions in the laboratory with rats or college sophomores but do not treat clients in psychotherapy. At the base of the two research styles is a key difference in approach to the problem of objectivity. Basic-research-followed-by-development handles the problem of distinguishing valid findings from the investigator's involvement by attempting to separate the tasks of knowledge generation from those of application. Clinical research works with the same issue by incorporating the relevant variables into the theory. Investigators then aspire to act in accord with a disciplined subjectivity when developing knowledge and treating clients. Disconfirmation is an important dimension in both orientations.

The personal knowledge that becomes available to investigators differs between clinical research and basic-research-followed-by-development (Polanyi, 1964). Clinical research brings investigators into direct contact with the events of change, while basic-research-followed-by-development does not. Bateson (1972) provided the distinction between proto-learning and deutero-learning. Proto-learning refers to increased capacity to make appropriate responses. Deutero-learning refers to the rate and manner of increasing or decreasing appropriate responses. Basic-research-followed-

by-development separates proto- and deutero-learning. The basic research person tends not to experience deutero-learning about human behavior. In organization studies, Bennis (1966) has discussed theories of changing to emphasize the point that change processes call for a different order of concepts than end states. Argyris (1978) defined double-loop learning as error defection that modies an organization's underlying norms, policies, and objectives, whereas single loop learning simply corrects errors without the corresponding modification of the underlying structures. Clinical research integrates understanding about change processes with knowledge of the condition to be changed. Basic-research-followed-by-development separates the two kinds of knowledge. Each mode of research produces the theories it does as a result of the kind of immediate experience obtained by investigators. Investigators, in turn, probably chose their mode of research because of the kind of experience they like to have.

Among social psychologists who study race relations, basic-research-followed-by-development appears to be the favored mode of research. Gerard (1983) and Cook (1984), for example, disagree strenuously about what knowledge basic research has produced that bears on desegregating public schools. Yet both agree on the value of the R&D model when effective methods of implementing programs are needed and when time and resources are available for the development (Gerard, 1983, p. 875; Cook, 1984, p. 829). Furthermore, both also agree that the Aronson, Stephan, Sikes, Blaney, and Snapp (1978) and Johnson and Johnson (1975) are good examples of the R&D model successfully implemented. These examples involve transfer of the laboratory organization into the classroom organization without concepts or methods for changing the wider context of schools or school

systems. Aronson (1984, p. 42) himself indicated that one of the reasons why he stopped working with his jigsaw intervention for classrooms was because it was so difficult to convince administrators to permit the intervention even though he was able to present solid data demonstrating its effectiveness. Gerard (1983, pp. 875-876) advocates continuing the R&D model, while he delivers a devastating criticism of the academic organization structure that perpetuates it.

> One of the most serious deterrents to successful R&D and systems engineering in the social sciences is the academic reward structure we ourselves perpetuate, especially in psychology. Promotion to tenure and beyond is best achieved by publishing as many short, neat, and methodologically simple papers as possible... Better to make your studies short, numerous, and focussed on a narrow problem that will be of interest to your own narrow group of fellow coworkers around the country who then can be counted on to write glowing letters... to support promotion... and to help each other get research grants... Changing the classroom is an enormous task that we psychologists could in our own way facilitate by changing our own norms.

Another response to the difficulties so far encountered is to alter the basic paradigm. This means making the contact hypothesis less central and, even then, using the new version rather than the old. It means putting the race, racism, and relations of investigators into the research process rather than leaving out those considerations. It means employing individual and group level concepts and applying them to the affect, cognitions, and behavior of investigators as well as of respondents. It means bringing organization theory to the design and management of laboratories and to planning and implementation of system-wide interventions. It means supporting clinical as well as basic-research-followed-by-development modes of investigation. All of this calls for a different order of theory than the contact hypothesis -- even as modified.

## An Intergroup Theory for Changing Race Relations in Organizations

The theory takes race relations as a special case of the more general problem of intergroup relations. Concepts and propositions pertain to human units from individuals to organizations in scope. Group is the focal entity of the framework. Within this psychological set, individuals appear mainly as group representatives; small groups show the forces of subgroups within them; organizations consist of interdependent groups with relations among them reflecting the characteristics of intergroup dynamics; and interorganizational relations are negotiations among groups of groups (Rice, 1969; Alderfer and Smith, 1982). In accord with the principles stated above, the theory has specific concepts to deal with end-states and other terms for change processes.

Material about end-states consists of a definition of groups-in-organizations, propositions about intergroup dynamics in organizations, explanation of embeddedness, a definition of human organization, and an explication of race relations in organizations through the terms of the theory. Change processes involve the concepts of racism, dialectical conflict, resistance-denial, and parallel processes. Changing race relations in organizations means altering end states of racial groups through the change processes identified by the theory.

### Groups in Organizations

The definition of groups-in-organizations used in this work deals with both internal and external properties. In addition, it takes account of the multi-level nature of group life and differentiates the external environment of groups specifically to take account of relations with other groups (i.e. intergroup relations). The definition states:

> A human group is a collection of individuals (1) who have significantly interdependent relations with each other; (2) who perceive themselves as a group by reliably distinguishing members from non-members; (3) whose group identity is recognized by non-members; (4) who have differentiated roles in the group as a function of expectations from themselves, other group members, and non-group members; and (5) who, as group members acting alone or in concert, have significantly interdependent relations with other groups (Alderfer, 1977).

*Our concept of group* takes account of individual, interpersonal, and intergroup levels of analysis. According to this view, any phenomenon pertaining to a person is multiply-determined by the internal dynamics of the person, the interpersonal dynamics of her or his group, and the intergroup dynamics of other groups in interaction with her or his own group. In turn, the intergroup relations among the interdependent elements of complex multi-group systems are a function of the internal dynamics of individuals, the interpersonal dynamics within groups, and characteristics of the environment within which the system is embedded.

## Propositions About Intergroup Dynamics in Organizations

To understand group behavior in organizations it is useful to distinguish between identity groups and organization groups. Members of identity groups share common biological characteristics, participate in equivalent historical experiences, and as a result tend to develop similar world views. The most commonly recognized identity groups are those based on race or ethnicity, gender, age, and family. Members of organizational groups are assigned similar primary tasks, participate in comparable work experiences, and as a result, tend to develop common organizational views. The most commonly recognized organization groups are those based on task or function and on hierarchy. From this perspective "organization structure" can be viewed as the reification of the intergroup dynamics that accompany enactment of the principles of hierarchy of authority and division of labor. People carry identity group memberships and their

consequences from organization to organization, while their organization group memberships depend on individual's relationships to particular organizations.

Every person is simultaneously a member of all her or his identity and organization groups. However, the group he or she represents at a given moment depends on the intergroup context in which events occur. The intergroup context is determined by other individuals who are present representing other groups, and by the state of group boundaries, power differences, affective patterns, cognitive formations, and leadership behavior of one's own and other groups.

Group boundaries. Both physical and psychological group boundaries determine group membership. Transactions among groups are regulated by variations in the permeability of the boundaries.

Power differences. The types of resources that can be obtained and used differ among groups. The variety of dimensions on which there are power differences and the degree of discrepancy among groups influence the degree of boundary permeability among groups.

Affective patterns. The permeability of group boundaries varies with the polarization of feeling among the groups, that is, it varies with the degree that group members associate mainly positive feelings with their own group and mainly negative feelings with other groups.

Cognitive formations, including "distortions." As a function of group boundaries, power differences, and affective patterns, groups tend to develop their own language (or elements of language, including social categories), condition their members' perceptions of objective and subjective phenomena, and transmit sets of propositions -- including theories and ideologies -- to explain the nature of experiences encountered by members and to influence relations with other groups.

Leadership behavior. The behavior of group leaders and representatives reflects boundary permeability, power differences, affective patterns, and cognitive formations of their group in relation to other groups. The behavior of group representatives, including formally designated leaders, is both cause and effect of the total pattern of intergroup relations in a particular situation (Alderfer, Tucker, Morgan, and Drasgow, 1983).

Embeddedness. Embeddedness of intergroup relations refers to interpretation of group level effects across different units of analysis; it concerns how system and subsystem dynamics are effected by supra system dynamics and vice versa (Smith and Alderfer, 1982). One may observe embeddedness from the perspective of individuals in relations to one another, of subgroups within groups, of whole groups in relation to one another, of intergroup relations within organizations, etc. Regardless of which unit is the focus of attention, the phenomenon of interpenetration across levels will be operating. Individuals carry images of their own and other groups as they serve in representational roles. Subgroups splits within face-to-face groups reflect differring degrees of identification and involvement with the group itself. These splits, in turn, reflect the group's relations to other groups in the system and to the larger system as a whole. The concept of embedded intergroup relations applies to both identity and to organization groups (Alderfer and Smith, 1982; Alderfer, 1983).

Definition of organization. A human organization is a set of interdependent groups who consciously accept a collective mission, who subordinate their group interests as necessary to the organization's mission, and who publicly receive support from the larger social order to pursue their organization's mission.

This concept of organization takes account of the unit from inside and outside, recognizes the subordination of group interests to the authority of the organization, and connects the organization to the society on which it depends for legitimacy. Empirically, this means that some kind of mission statement is necessary to assert that a system has met the internal conditions necessary to be called an organization, and that some record of legitimate transactions with society's representatives are necessary to meet the external conditions. The definition is consistent with the principle of embeddedness and makes the organization subject to intergroup dynamics internally and externally.

Race relations in organizations. Racial groups are identity groups in organizations. Black and white groups, in particular, differ in the degree to which they generally are consciously aware of the full range of group forces acting upon them. In predominantly white organizations, for example, the "success" or "failure" of a black person is often seen by black and white members as reflecting upon the entire racial group, while the performance of a white person is seen as more of an individual matter (Alderfer, Alderfer, Tucker, and Tucker, 1980). White people are less likely to see themselves as a group than are black people. Both the ideology of individualism and ethnic differences among whites tend to be perceived by whites as reasons why they do not experience themselves as a group. Nevertheless, when white managers meet together and attempt to describe "the white group" in their corporation, a high degree of convergence among their experiences can be observed. Empirical studies show that membership in the white group alone and white group membership in interaction with specific kinds of individual experiences predict how the white group is perceived by blacks and whites (Alderfer, Tucker, Morgan,

and Drasgow, 1983). There is little doubt that white people perceive blacks as a group or that blacks perceive whites as a group (Griffin, 1960; Carmichael and Hamilton, 1967; Silberman, 1964; Campbell, 1971; Schuman and Hatchett, 1974). Empirically, as well as conceptually, black and white individuals are members of racial groups. I state this obvious conclusion because of repeated evidence that many white people, including those who study race relations, do not approach the subject with an awareness that their racial group membership is a variable of significance.

In predominantly white organizations, the group boundaries, power differences, affective patterns, cognitive formations, and leadership behavior of blacks and whites differ. These differences follow, in part, from how whites and blacks tend to be distributed among organization groups. Blacks tend to find membership in lower ranking hierarchical groups and in less central staff groups. One result is that blacks tend to have less power and leadership potential than whites. This picture emerges from the historical pattern of white society that kept blacks largely outside predominantly white organizations until the last two decades and from beliefs among white people that blacks are inherently inferior and therefore "deserve" to be kept in less central, less influential positions (Bennett, 1962; Alvarez, Lutterman and Associates, 1979; Davis and Watson, 1982).

The boundaries of black and white groups differ in permeability within predominantly white organizations. Even though black people rarely appear in the most senior management positions, whites typically do not see this as a consequence of their group boundaries being closed to blacks. Nevertheless, descriptively speaking, the top management groups of most corporations are white groups. Faced with relatively small numbers, less access to influential positions, and a sense of isolation from the main-

stream of corporate activities, black members may establish formal or informal support systems. Reactions of senior white officials to these activities by blacks vary in important ways. In some instances, the response is highly punitive and prohibitive (Davis and Watson, 1982). In other cases, the white reaction is more supportive (Alderfer, Alderfer, Tucker, and Tucker, 1980).

The manner in which black employees are embedded in predominantly white corporate organizations is therefore complex. When there are black officials in senior positions, when there is committed public recognition that race is a significant dimension of organizational life, when there are officially sanctioned support systems for black employees, and when the organization relates to its environment in a manner suportive to blacks, then a predominantly white organization is taking necessary first steps to deal with its racial dynamics. When these conditions do not exist, the outlook for constructive change in race relations is far less favorable.

Concept of Racism. A concept of racism is essential in a theory of changing race relations. Racism is the problem that progressive change aims to solve and the condition that regressive change re-establishes. In the context of this theory, racism applies to researchers as well as to respondents. Making the concept explicit and central guards against blindspots that white investigators have often shown in their research on race. The concept makes the value position of the theory clear and avoids the illusion that one can study race relations in this society from a neutral or value free position.

The term itself, however, is subject to misunderstanding. Rarely is the word used without evoking strong feelings. Understanding these emotions

is a crucial element in learning about race relations. Eliminating the term does not eliminate the feelings. Using the term accepts the feelings and increases the chances tnat learning can occur. For some people the term means only blatant aggressive destruction of one racial group by another. Here the meaning includes multiple dimensions.

The idea of racism begins with the power relations between racial groups in conflict. For racism to be an appropriate term, the racial groups must be of unequal power; and the dominant group must use its superior power to damage or to destroy the individual and collective well- being of the subordinate group. Racism is, therefore, not equivalent to ethnocentrism, which may occur among groups of approximately equal power. White racism is the more common form in this culture because blacks rarely have the power to be racist.

Racism occurs at several units of social groups (Jones, 1972). Prejudiced individuals represent just one version of racism. Unless these individuals occupy positions of substantial authority, this form of racism may be the least potentially damaging. Collective forms of racism affect groups, organizations, and the culture as a whole. One is alerted to collective forms of racism when destructive effects continue to occur to members of a low power group regardless of who the members of either racial group are.

Racism also varies in how consciously people support racist practices. When organizations such as the Klu Klux Klan openly advocate assaults on black people, there is relatively little doubt that one is witnessing collective racism. But racism can also be practiced covertly. If a situation involves conflict between members of racial groups with unequal power, and if members of the dominant group deny that race is a factor in influencing what happened, then signs of unconscious racism are present. To deny

that race is relevant when it might be is to show an insensitivity that is demeaning to potentially aggrieved parties. The power of unconscious racial feelings is strong enough that one can be more certain that the race is getting appropriate attention if people examine whether race is relevant in a conflict rather than if they energetically deny that racial forces could be operating. The fact that black and white people may both voice denial is not evidence against the influence of racial factors. As the less powerful group, blacks may deny the presence of racial feelings as a means of survival.

Finally, racism varies by degree of virulence. The most destructive form involves killing and injuring members of the less dominant group by members of the more dominant group. A lest virulent form may involve members of the dominant group telling racial group jokes at the expense of members of the subordinate group.

Dialectical Conflict. Not all disagreements, differences of opinion, or variations in perception about racial matters are evidence of racism. Black and white people generally have different life experiences on matters of race, and, as a result, bring different affective patterns and cognitive formations to any serious work on race (cf. Baldwin and Mead, 1970). Dialectical conflict is the process of respecting these natural differences and using them to eliminate racism and improve race relations.

The methods of dialectical conflict draw upon several ideas already presented. People are viewed as both individuals and racial group members. Among the individuals from each racial group, we assume that there are different opinions and different perspectives. When racial matters are under consideration, we assume that a person's race is always relevant. Thus the questions, "what is the black perspective?" and "what is the white

perspective?", are readily acceptable modes of dialogue. Similarly an individual may say, "Speaking as a black person..." or "Speaking as a white person..." The concept of dialectical conflict does not assume that blacks and whites always disagree on matters of race, that all disagreements follow racial groups, or that blacks always have the more progressive views and whites always have the more conservative perspectives. When racial matters can be thoroughly and openly examined, people find that blacks and whites often can agree, that important disagreements occur within both racial groups, that whites sometimes advocate more progressive views than blacks, and that the more progressive stance may not always lead to the more effective outcome.

Structurally, the implementation of dialectical conflict calls for enough blacks and whites so that each racial group can experience its own group forces, that each person can be differentiated from her or his racial group, and that intergroup racial dialogue can occur. Resolving differences of opinion, when possible and desirable, is both an intragroup and an intergroup matter. Problem solving approaches search for outcomes that respect the interests and satisfy the needs of both racial groups. The most favorable outcome of dialectical conflict consists of solutions that are synergistic. Often these kinds of solutions can occur. But "win-win" solutions are not always possible. When issues pertain to scarce resources, the dialectical process should produce outcomes that reflect the compromise of roughly equal partners. Neither exclusively white domination, nor unilateral imposition of black preferences is desirable. White domination maintains the status quo, or more likely, results in regressive change. Unilateral imposition of black preferences generates white resistance that cannot be worked through and eventually produces white backlash. To achieve an effective dialectic requires complementary

4420E
Dec 83

LIST 2
ONR FIELD

sychologist
ffice of Naval Research
etachment, Pasadena
030 East Green Street
asadena, CA 91106

LIST 1
MANDATORY

Defense Technical Information Center (12 copies)
ATTN: DTIC DDA-2
Selection and Preliminary Cataloging Section
Cameron Station
Alexandria, VA 22314

Library of Congress
Science and Technology Division
Washington, D.C. 20540

Office of Naval Research (3 copies)
Code 4420E
800 N. Quincy Street
Arlington, VA 22217

Naval Research Laboratory (6 copies)
Code 2627
Washington, D.C. 20375

Office of Naval Research
Director, Technology Programs
Code 200
800 N. Quincy Street
Arlington, VA 22217

Weigel, R. H., Wiser, P. L. and Cook, S. W. The Impact of Cooperative Learning Experiences on Cross-Ethnic Relations and Attitudes, Journal of Social Issues, 1975, 31, 219-244.

Wideman, John. Listen to the Drum, Sports Illustrated, 1984, 61 (Nov. 26), 58-69.

Wuebben, P. L. Straits, B. C., and Shulman, G. I. (eds.) The Experiment as a Social Occasion. Berkeley, CA: Glendessary, 1974.

Reicken, Henry W. A Program for Research on Experiments in Social Psychology. In Washburne, N. F. (ed.) Decisions, Values, and Groups. Elmsford, NY: Pergamon, 1962, 25-41.

Rice, A. K. Individual, Group, and Intergroup Processes, Human Relations 1969, 22, 565-584.

Rosenthal, Robert. Experimenter Effects in Behavioral Research. New York: Appleton Century Crafts, 1966.

Sarason, Seymour B. Psychology Misdirected. New York: Free Press, 1981.

Schuman, H. and Hatchett, S. Black Racial Attitudes: Trends and Complexities. Ann Arbor, MI: Survey Research Center of University of Michigan, 1974.

Silberman, Charles E. Crisis in Black and White. New York: Vintage, 1964.

Searles, H. J. The Informational Value of the Supervisor's Emotional Experiences, Psychiatry, 1955, 18, 135-146.

Thompson, John. Interview. In Windeman, John. Listen to the Drum, Sports Illustrated, 1984, 61 (Nov. 26), 58-69.

Triandis, Harry C. Allocentric vs. Idiocentric Social Behavior: A Major Cultural Difference between Hispanics and the Mainstream. Technical Report ONR-33 Champaign, IL: University of Illinois Department of Psychology, 1984.

_____. Allocentric vs. Idiocentric Social Behavior: A Major Cultural Difference between Hispanics and the Mainstream. Technical Report ONR-16. Champaign, IL: University of Illinois Department of Psychology, 1983.

Tucker, Robert C. Towards a Philosophy of Social Science for Black-White Studies. Technical Report ONR-2. New Haven, CT: Yale School of Organization and Management, 1984.

Jones, James M. Prejudice and Racism. Reading, MA: Addison-Wesley, 1972.

Katz, Daniel and Kahn, Robert L. Social Psychology of Organizations. New York: Wiley, 1966.

Kerner, D. and Lindsay, J. Report on the National Advisory Commission on Civil Disorders. New York: E. P. Dutton, 1968.

Kohut, H. The Restoration of Self. New York: International Universities Press, 1977.

Kuhn, Thomas. The Structure of Scientific Revolutions. Chicago: University of Chicago, 1962.

Ladner, Joyce A. (ed.) The Death of White Sociology. New York: Vintage Books, 1973.

Landis, Dan, Hope, Richard O., and Day, Harry R. Training for Desegregation in the Military. In Miller, Norman and Brewer, Marilyn B. (eds.) Groups in Contact. New York: Academic Press, 1984, 257-278.

Marris, Peter. Loss and Change. New York: Pantheon, 1974.

Merton, Robert K. Insiders and Outsiders: A Chapter in the Sociology of Knowledge, American Journal of Sociology, 1972, 78, 9-47.

Miller, James G. Living Systems. New York: McGraw-Hill, 1978.

Nordlie, Peter G. Proportion of Black and White Army Officers in Command Positions. In Alvarez, Radolfo and Lutterman, Kenneth G. (eds.) Discrimination in Organizations. San Francisco, CA: Jossey-Bass, 1979, 158-171.

Orne, Martin T. On the Social Psychology of the Psychology Experiment, American Psychologist, 1962, 17, 776-783.

Polanyi, Michael. Personal Knowledge. New York: Harper and Row, 1964.

Davis, George and Watson, Glegg. Black Life in Corporate America. New York: Doubleday, 1982.

Dollard, John and Auld, Frank. Scoring Human Motives. New Haven, CT: Yale University Press, 1956.

Erikson, E. H. Insight and Responsibility. New York: W. W. Norton, 1964.

Gerard, Harold B. School Resegregation: The Social Science Role, American Psychologist, 1983, 38, 896-877.

Gerard, Harold B. and Miller, Norman. School Desegregation. New York: Plenum, 1975.

Gersick, Connie J.G. Life Cycles of Ad Hoc Task Groups. Technical Report No. 4. New Haven, CT: Yale School of Organization and Management, 1983.

Hochschild, Jennifer L. The New American Dilemma: Liberal Democracy and School Desegregation. New Haven, CT: Yale Press, 1984.

Hyman, Herbert, Cobb, W. J., Feldman, J. J., Hart, C. W., Stember, C. H. Interviewing in Social Research. Chicago, IL: University of Chicago, 1954.

Johnson, David W., Johnson, Roger T. and Maruyama, Geoffrey. Goal Interdependence and Interpersonal Attraction in Heterogeneous Classrooms: A Meta Analysis. In Miller, Norman and Brewer, Marilyn B. (eds.) Groups in Contact. New York: Academic Press, 1984, 187-212.

Jones, James M. Conceptual and Strategic Issues in the Relationship of Black Psychology to American Social Science. In Boykin, Wade et al (eds.) Research Directions of Black Psychologists. New York: Russell Sage Foundation, 1979, 390-432.

Bettelheim, Bruno. The Informed Heart. New York: Free Press, 1960.

Binkin, Martin, Eitelberg, Mark, J. and Smith, Marvin M. Blacks and the Military. Washington, DC: Brookings, 1982.

Boykin, A. Wade, Franklin, Anderson J., and Yates, J. Frank (eds.) Research Directions of Black Psychologists. New York: Russell Sage Foundation, 1979.

Brewer, Marilyn B., and Miller, Norman. Beyond the Contact Hypothesis: Theoretical Perspectives. In Miller, Norman and Brewer, Marilyn B. (eds.) Groups in Contact. New York: Academic Press, 1984. 281-302.

Campbell, Angus. White Attitudes Toward Black People. Ann Arbor, MI: Institute for Social Research, 1971.

Carlsmith, J. M., Ellsworth, P.C., and Aronson, E. Methods of Research in Social Psychology. Reading, MA: Addison-Wesley, 1976.

Clark, Kenneth B. The Role of Social Scientists 25 Years After Brown, Personality and Social Psychology Bulletin, 1979, 5, 477-481.

Cohen, Elizabeth G. Design and Redesign of the Desegregated School: Problems of Status, Power, and Conflict. In Stephan, Walter G. and Faagin, Joe R. (eds.) School Desegregation. New York: Plenum Press, 1980, 251-280.

Comer, James P. School Power. New York: Free Press, 1980.

Cook, Stuart W. Cooperative Interaction in Multiethnic Contexts. In Miller, Norman and Brewer, Marilyn B. Groups in Contact. New York: Academic Press, 1984, 155-185.

_____. Social Science and School Desegregation: Did We Mislead the Supreme Court? Personality and Social Psychology Bulletin, 1979, 5, 420-437.

_____. The 1954 Social Science Statement and School Desegregation: A Reply to Gerard, American Psychologist, 1984, 39, 819-832.

Alderfer, Clayton P., Tucker, Robert C., Morgan, David R., and Drasgow, Frits. Black and White Cognitions of Changing Race Relations in Management, Journal of Occupational Behavior, 1983, 4, 105-136.

Amir, Yehuda. Contact Hypothesis in Ethnic Relations, Psychological Bulletin, 1969, 71, 319-342.

Argyris, Chris. Personality and Organization. New York: Harper and Row, 1957.

Argyris, Chris and Gebon, Donald. Organizational Learning: A Theory of Action Perspective. Reading, MA: Addison-Wesley, 1978.

Aronson, Elliot. The Jigsaw Classroom. Beverly Hills, CA: Sage, 1978.

_____. A Missionary for Social Psychology, Psychology Today, 1984, 18, 40-45.

_____ and Osterow, Neal. Experiments in the Desegregated Classroom: The Effects of Cooperation on Prosocial Behavior and Academic Performance. Working Paper, Department of Psychology. Santa Cruz, CA, 1981.

Baldwin, James and Mead, Margaret. A Rap on Race. New York: Dell, 1970.

Bateson, Gregory. Steps to An Ecology of Mind. New York: Ballantine, 1972.

Bennett, Lerone, Jr. Before the Mayflower. Baltimore, MD: Penguin Books, 1962.

Bennis, Warren. Changing Organizations. New York: McGraw-Hill, 1966.

Berg, David N. Developing Clinical Field Skills: An Apprenticeship Model. In Alderfer, Clayton P. and Cooper, Cary L. (eds.) Advances in Experiential Social Processes. Vol. 2. New York: Wiley, 1980, 143-164.

Berry, J. W. Cultural Relations in Plural Societies: Alternatives to Segregation and Their Socio-Psychological Implications. In Miller, Norman and Brewer, Marilyn B. (eds.) Groups in Contact. New York: Academic Press, 1984, 11-27.

References

Alderfer, Clayton P. Change Processes in Organizations. In Dunnette, M. D. (ed.) Handbook of Industrial and Organizational Psychology. Chicago: Rand-McNally, 1976, 1591-1638.

_____. Improving Organizational Communication through Long-Term Intergroup Intervention, Journal of Applied Behavioral Science, 1977, 13, 193-210.

_____. An Intergroup Perspective on Group Dynamics. In Lorsch, Jay (ed.) Handbook of Organizational Behavior. Englewood Cliffs, NJ: Prentice Hall, 1983.

_____. Group and Intergroup Relations. In Hackman, J. Richard and Suttle, J. Lloyd (eds.) Improving Life at Work. Santa Monica, CA: Goodyear, 1977, 227-296.

_____. The Problems of Changing White Males' Beliefs and Behavior in Race Relations. In Goodman, Paul (ed.) Change in Organizations. San Francisco, CA: Jossey Bass, 1982, 122-165.

_____. Taking Our Selves Seriously as Researchers. In Berg, David and Smith, Kenwyn K. (eds.) The Clinical Demands of Social Research. Beverly Hills, CA: Sage, 1985.

_____, Alderfer, Charleen J., Tucker, Leota, and Tucker, Robert C. Diagnosing Race Relations in Management, Journal of Applied Behavioral Science, 1980, 16, 135-166.

_____ and Brown, L. Dave. Learning from Changing. Santa Monica, CA: Sage, 1975.

_____ and Smith Kenwyn K. Studying Intergroup Relations Embedded in Organizations, Administrative Science Quarterly, 1982, 27, 35-36.

relationships carry the seeds and force for changing race relations in organizations.

## Conclusion

The basic contention in presenting the intergroup theory of changing race relations in organizations is that more than "hard data" is needed to effect change in the structures and processes that maintain racism in the organizations of our society. A strong theory is also required. I have presented such a theory and compared it with the leading social psychological alternative. The alternative theory agrees with the contact hypothesis in its press for equity between blacks and whites. However, the contact hypothesis is limited in important ways that the alternative is not. The alternative provides more explanatory mechanisms for resistance and for progressive change. No one experienced with changing race relations can expect an easy time, regardless of which conceptual position is utilized. Nevertheless, a more complete framework offers the promise of improving upon the efforts that have gone before.

within group or between group differences are suppressed or obscured (Alderfer and Smith, 1982). Under the best conditions there are equal numbers of black and white members and they are also balanced by gender. Total size of the groups is also an important consideration. The group should be large enough to pick up the most significant variations within and between groups and yet not so large that members are unable to develop a sense of themselves as a group. I have worked fruitfully with groups ranging between four and twenty members.

Microcosm groups may be created outside and inside organizations (Alderfer, 1977; Alderfer, Alderfer, Tucker, and Tucker, 1980). Outside the group takes the form of a research or consulting team. Inside the groups is an advisory group assisting with the project. The most desirable situation includes both inside and outside groups. On matters of race, regardless of whether one or two microcosm groups are used, strong representation from both black and white groups is essential to establish and maintain dialectical conflict. Members of the outside team need their own knowledge of race relations rooted in their own well-developed sense of racial identity. As a group, they need to have the individual commitment and collective capacity to operate effectively as a team. Members of the inside group should represent a cross section of organization groups by hierarchy and function, include a range of views about race relations in both racial groups, and exhibit a willingness to learn more about race relations. When groups can be created outside and inside the organization, parallel processes and dialectical conflict occur within the outside group, within the inside group, between the inside and outside groups, and between the inside group and the organization. These intergroup and inter-racial

Parallel processes involve absorptive and projective movements, and may have constructive or destructive effects (Alderfer, 1983). Absorbing effects may be useful for diagnostic purposes, if a unit can permit itself consciously to take on the properties of another system for the purposes of empathic understanding. On the other hand, merely taking on the condition of another system unconsciously, robs the absorbing system of its own unique identity. Projective effects may be useful for change purposes, if the unit projecting is in significantly better condition than the receiving unit, if the process is undertaken with sufficient consciousness by both parties, and if the receiving unit chooses actively to receive the projection. But unexamined projective processes may simply cause a subordinate unit to take on the character of an oppressor (Bettelheim, 1960).

Parallel processes may be observed naturally, or conditions may be created to heighten their visibility. Taking a passive or active stand toward parallel processes depends on whether one has an hypothesis about the relevant dimensions in a particular setting and whether one has the resources to establish social structures that heighten their accessiblity. The more precise the hypothesis and the more available the resources, then the more feasible it is to establish an active relationship toward parallel processes.

The chief means to heighten the visibility and accessibility of parallel processes is to create a microcosm group that reflects the dimensions of whatever intergroup relationship is central to one's hypothesis. In the case of race relations, for example, the microcosm group should include sufficient numbers of black and white members so that no major

Parallel Processes and Microcosm Groups. The term parallel processes refers to the occasions when related units change in a manner that one takes on similar affect, cognitions, and behavior as the other. A sense evolves that one unit is injecting its condition into the other and that the other is receiving that condition. In time, the two units seem to follow similar paths although they start in different places.

Parallel processes usually begin without conscious awareness of either party. With adequate attention, parallel processes can be raised to consciousness and utilized in the service of constructive change. Without competent attention, parallel processes maintain the status quo through the operation of unconscious resistance-denial or through the outbreak of destructive irrational processes (Alderfer, 1983).

Parallel processes may occur between units of the same order. An interpersonal relationship between two individuals, for example, may have the effect of infecting one person with the feelings, ideas, and behaviors of another (Searles, 1955). Members of a group, as another example, may take on the roles and behaviors of another group with whom they have had intensive interaction (Alderfer, 1976, 1977, 1983).

Parallel processes may also occur between units at different levels of analysis. Systems, regardless of the unit, may reflect parallel processes in their suprasystem or from their subsystems. The condition of race relations in the society in which the business is located will affect relations between blacks and whites in the organization -- an example of the suprasystem influencing the system by parallel processes. The state of race relations in a work group will affect how that group relates to other groups in the organization -- a situation in which subsystems affect a system through the mechanism of parallel processes.

structures when normal conditions do not naturally lead to dialogue among equal parties.

Resistance and Denial. Change processes go hand and hand with stability forces. Without a standard against which movement can be measured, any concept of change is meaningless. Unless one's objective is total destruction of a system, some degree of continuity is essential for any significant change. Systems of all kinds regularly demonstrate conservative impulses in the face of the most dramatic changes (Marris, 1974). To a person or group committed to progressive change, conservative forces may seem like they are enemical to change. In fact, resistance is so natural as to cause concern if it is not observed. Accepting resistance and working with it is a recurrant theme implicit in the concepts of racism, dialectical conflict, and parallel processes.

Denial is a special form of resistance. It is helpful insofar as it signals that resistance is present. In clear form, denial blocks inquiry. Denial negates questions about racial matters, transforms statements in a manner that weakens their impact, or inverts assertions so that confusion about their meaning occurs. Examples are many. A white employee says, "We have no racial problems because there are no black people in our work group." A white man shoots a group of four black youths who were trying to rob him, and a white political official says, "The episode has no racial meaning because the young men were thugs." Denial is an especially powerful and frequently used defense because racism represents a major contradiction to the espoused value system of the United States.

LIST 3
OPNAV

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Head, Research, Development, and
Studies Branch (Op-115)
1812 Arlington Annex
Washington, DC 20350

Director
Civilian Personnel Division (OP-14)
Department of the Navy
1803 Arlington Annex
Washington, DC 20350

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Director, Human Resource Management
Plans and Policy Branch (Op-150)
Department of the Navy
Washington, DC 20350

Chief of Naval Operations
Head, Manpower, Personnel, Training
and Reserves Team (Op-964D)
The Pentagon, 4A478
Washington, DC 20350

Chief of Naval Operations
Assistant, Personnel Logistics
Planning (Op-987H)
The Pentagon, 5D772
Washington, DC 20350

LIST 4
NAVMAT & NPRDC

NAVMAT

Program Administrator for Manpower,
Personnel, and Training
MAT-0722
800 N. Quincy Street
Arlington, VA 22217

Naval Material Command
Management Training Center
NAVMAT 09M32
Jefferson Plaza, Bldg #2, Rm 150
1421 Jefferson Davis Highway
Arlington, VA 20360

Naval Material Command
Director, Productivity Management Office
MAT-00K
Crystal Plaza #5
Room 632
Washington, DC 20360

Naval Material Command
Deputy Chief of Naval Material, MAT-03
Crystal Plaza #5
Room 236
Washington, DC 20360

Naval Personnel R&D Center (4 copies)
Technical Director
Director, Manpower & Personnel
Laboratory, Code 06
Director, System Laboratory, Code 07
Director, Future Technology, Code 41
San Diego, CA 92152

Navy Personnel R&D Center
Washington Liaison Office
Ballston Tower #3, Room 93
Arlington, VA 22217

4420E
Dec 83

LIST 7
HRM

Officer in Charge
Human Resource Management Detachment
Naval Air Station
Alameda, CA 94591

Officer in Charge
Human Resource Management Detachment
Naval Submarine Base New London
P.O. Box 81
Groton, CT 06340

Officer in Charge
Human Resource Management Division
Naval Air Station
Mayport, FL 32228

Commanding Officer
Human Resource Management Center
Pearl Harbor, HI 96860

Commander in Chief
Human Resource Management Division
U.S. Pacific Fleet
Pearl Harbor, HI 96860

Officer in Charge
Human Resource Management Detachment
Naval Base
Charleston, SC 29408

Commanding Officer
Human Resource Management School
Naval Air Station Memphis
Millington, TN 38054

Human Resource Management School
Naval Air Station Memphis (96)
Millington, TN 38054

List 7 (Continued)

Commanding Officer
Human Resource Management Center
1300 Wilson Boulevard
Arlington, VA 22209

Commanding Officer
Human Resource Management Center
5621-23 Tidewater Drive
Norfolk, VA 23511

Commander in Chief
Human Resource Management Division
U.S. Atlantic Fleet
Norfolk, VA 23511

Officer in Charge
Human Resource Management Detachment
Naval Air Station Whidbey Island
Oak Harbor, WA 98278

Commanding Officer
Human Resource Management Center
Box 23
FPO New York 09510

Commander in Chief
Human Resource Management Division
U.S. Naval Force Europe
FPO New York 09510

Officer in Charge
Human Resource Management Detachment
Box 60
FPO San Francisco 96651

Officer in Charge
Human Resource Management Detachment
COMNAVFORJAPAN
FPO Seattle 98762

LIST 8
NAVY MISCELLANEOUS

Naval Military Personnel Command (2 copies)
HRM Department (NMPC-6)
Washington, DC 20350

Naval Training Analysis
and Evaluation Group
Orlando, FL 32813

Commanding Officer
ATTN: TIC, Bldg. 2068
Naval Training Equipment Center
Orlando, FL 32813

Chief of Naval Education
and Training (N-5)
Director, Research Development,
Test and Evaluation
Naval Air Station
Pensacola, FL 32508

Chief of Naval Technical Training
ATTN: Code D17
NAS Memphis (75)
Millington, TN 38D54

Navy Recruiting Command
Head, Research and Analysis Branch
Code 434, Room 8001
801 North Randolph Street
Arlington, VA 22203

Navy Recruiting Command
Director, Recruiting Advertising Dept.
Code 40
801 North Randolph Street
Arlington, VA 22203

Naval Weapons Center
Code 094
China Lake, CA 93555

Jesse Orlansky
Institute for Defense Analyses
1801 North Beauregard Street
Alexandria, VA 22311

LIST 9
USMC

Headquarters, U.S. Marine Corps
Code MPI-20
Washington, DC 20380

Headquarters, U.S. Marine Corps
ATTN: Scientific Adviser,
Code RD-1
Washington, DC 20380

Education Advisor
Education Center (E031)
MCDEC
Quantico, VA 22134

Commanding Officer
Education Center (E031)
MCDEC
Quantico, VA 22134

Commanding Officer
U.S. Marine Corps
Command and Staff College
Quantico, VA 22134

# LIST 10
## OTHER FEDERAL GOVERNMENT

Defense Advanced Research
Projects Agency
Director, Cybernetics
Technology Office
1400 Wilson Blvd, Rm 625
Arlington, VA 22209

Dr. Douglas Hunter
Defense Intelligence School
Washington, DC 20374

Dr. Brian Usilaner
GAO
Washington, DC 20548

National Institute of Education
EOLC/SMO
1200 19th Street, N.W.
Washington, DC 20208

National Institute of Mental Health
Division of Extramural Research Programs
5600 Fishers Lane
Rockville, MD 20852

National Institute of Mental Health
Minority Group Mental Health Programs
Room 7 - 102
5600 Fishers Lane
Rockville, MD 20852

Office of Personnel Management
Office of Planning and Evaluation
Research Management Division
1900 E Street, N.W.
Washington, DC 20415

Chief, Psychological Research Branch
U.S. Coast Guard (G-P-1/2/TP42)
Washington, D.C. 20593

Social and Developmental Psychology
Program
National Science Foundation
Washington, D.C. 20550

Dr. Earl Potter
U.S. Coast Guard Academy
New London, CT 06320

LIST 10 CONT'D

OTHER FEDERAL GOVERNMENT

Division of Industrial Science
& Technological Innovation
Productivity Improvement Research
National Science Foundation
Washington, D.C. 20550

Douglas B. Blackburn, Director
National Defense University
Mobilization Concepts Development
Center
Washington, D.C. 20319

Chairman, Dept. of Medical Psychology
School of Medicine
Uniformed Services University of
the Health Sciences
4301 Jones Bridge Road
Bethesda, MD 20814

LIST 11
ARMY

Headquarters, FORSCOM
ATTN: AFPR-HR
Ft. McPherson, GA 30330

Army Research Institute
Field Unit - Leavenworth
P.O. Box 3122
Fort Leavenworth, KS 66027

Technical Director (3 copies)
Army Research Institute
5001 Eisenhower Avenue
Alexandria, VA 22333

Head, Department of Behavior
Science and Leadership
U.S. Military Academy, New York 10996

Walter Reed Army Medical Center
W. R. Army Institute of Research
Division of Neuropsychiatry
Forest Glen
Washington, D.C. 20012

Army Military Personnel Command
Attn: DAPC-OE
200 Stovall Street
Alexandria, VA 22322

Research Psychologist
Selection and Classification Performance
Measurement Team
Army Research Institute
Attention: PERI-RS
5001 Eisenhower Avenue
Alexandria, VA 22333

# LIST 12
## AIR FORCE

Air University Library
LSE 76-443
Maxwell AFB, AL 36112

Head, Department of Behavioral
Science and Leadership
U.S. Air Force Academy, CO 80840

MAJ Robert Gregory
USAFA/DFBL
U.S. Air Force Academy, CO 80840

AFOSR/NL
Building 410
Bolling AFB
Washington, DC 20332

Department of the Air Force
HQUSAF/MPXHL
Pentagon
Washington, DC 20330

Technical Director
AFHRL/MO(T)
Brooks AFB
San Antonio, TX 78235

AFMPC/MPCYPR
Randolph AFB, TX 78150

4420E
Dec 83

Sequential by Principal Investigator

LIST 14
CURRENT CONTRACTORS

Dr. Clayton P. Alderfer
Yale University
School of Organization and Management
New Haven, Connecticut 06520

Dr. Janet L. Barnes-Farrell
Department of Psychology
University of Hawaii
2430 Campus Road
Honolulu, HI 96822

Dr. Jomills Braddock
John Hopkins University
Center for the Social Organization
of Schools
3505 N. Charles Street
Baltimore, MD 21218

Dr. Jeanne M. Brett
Northwestern University
Graduate School of Management
2001 Sheridan Road
Evanston, IL 60201

Dr. Terry Connolly
University of Arizona
Department of Psychology, Rm. 312
Tucson, AZ 85721

Dr. Richard Daft
Texas A&M University
Department of Management
College Station, TX 77843

Dr. Randy Dunham
University of Wisconsin
Graduate School of Business
Madison, WI 53706

List 14 (continued)

Dr. Henry Emurian
The Johns Hopkins University
School of Medicine
Department of Psychiatry and
Behavioral Science
Baltimore, MD 21205

Dr. Arthur Gerstenfeld
University Faculty Associates
710 Commonwealth Avenue
Newton, MA 02159

Dr. J. Richard Hackman
School of Organization
and Management
Box 1A, Yale University
New Haven, CT 06520

Dr. Wayne Holder
American Humane Association
P.O. Box 1266
Denver, CO 80201

Dr. Daniel Ilgen
Department of Psychology
Michigan State University
East Lansing, MI 48824

Dr. Lawrence R. James
School of Psychology
Georgia Institute of
Technology
Atlanta, GA 30332

Dr. David Johnson
Professor, Educational Psychology
178 Pillsbury Drive, S.E.
University of Minnesota
Minneapolis, MN 55455

.st 14 (continued)

:. Dan Landis
ıe University of Mississippi
)llege of Liberal Arts
ıiversity, MS 38677

:. Frank J. Landy
ıe Pennsylvania State University
epartment of Psychology
17 Bruce V. Moore Building
ıiversity Park, PA 16802

r. Bibb Latane
ıe University of North Carolina
at Chapel Hill
anning Hall 026A
hapel Hill, NC 27514

r. Cynthia D. Fisher
ollege of Business Administration
exas A&M University
ollege Station, TX 77843

r. Lynn Oppenheim
harton Applied Research Center
niversity of Pennsylvania
hiladelphia, PA 19104

r. Thomas M. Ostrom
he Ohio State University
epartment of Psychology
16E Stadium
04C West 17th Avenue
olumbus, OH 43210

r. William G. Ouchi
niversity of California,
Los Angeles
raduate School of Management
os Angeles, CA 90024

t 14 (continued)

Robert Rice
te University of New York at Buffalo
artment of Psychology
falo, NY 14226

Irwin G. Sarason
versity of Washington
artment of Psychology, NI-25
ttle, WA 98195

Benjamin Schneider
artment of Psychology
versity of Maryland
lege Park, MD 20742

Edgar H. Schein
sachusetts Institute of
Technology
an School of Management
bridge, MA 02139

H. Wallace Sinaiko
gram Director, Manpower Research
and Advisory Services
thsonian Institution
N. Pitt Street, Suite 120
xandria, VA 22314

Eliot Smith
chology Department
due University
t Lafayette, IN 47907

Richard M. Steers
duate School of Management
versity of Oregon
ene, OR 97403

Barbara Saboda
lic Applied Systems Division
tinghouse Electric Corporation
. Box 866
umbia, MD 21044

List 14 (continued)

Dr. Harry C. Triandis
Department of Psychology
University of Illinois
Champaign, IL 61820

Dr. Anne S. Tsui
Duke University
The Fuqua School of Business
Durham, NC 27706

Dr. Andrew H. Van de Ven
University of Minnesota
Office of Research Administration
1919 University Avenue
St. Paul, MN 55104

Dr. Philip Wexler
University of Rochester
Graduate School of Education &
Human Development
Rochester, NY 14627

Dr. Sabra Woolley
SRA Corporation
901 South Highland Street
Arlington, VA 22204

END

FILMED

7-85

DTIC